



Application No.: 09/682,142

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**RESPONSE UNDER 37 CFR §1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 3677**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

SIVAVEC et al.

Group Art Unit: 3677

Application No.: 09/682,142

Examiner: Katherine W. Mitchell

Filed: July 26, 2001

For: PERMEABLE-REACTIVE BARRIER MONITORING
METHOD AND SYSTEM

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**REQUEST FOR RECONSIDERATION AFTER FINAL REJECTION UNDER
37 C.F.R. §1.116**

Assistant Commissioner for Patents
Box AF
Washington, D. C. 20231

Sir:

Claims 1 to 35 and 44 to 66 are pending. The April 23, 2003 Final Rejection rejects claims 1 to 35 and 44 to 66 under 35 U.S.C. §103(a) over the PRB paper(s) and Misquitta and claims 1 to 35 and 44 to 66 under 35 U.S.C. §103(a) over the Corps of Engineers paper(s) and Misquitta. Reconsideration is respectfully requested for the following reasons:

I. THE REJECTIONS ARE BASED ON IMPROPER COMBINATIONS OF REFERENCES

“The PTO “must not only assure that... requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion” (emphasis added). *In re Lee*, 61 USPQ 2d 1430, 1434, 277 F.3d 1338, ____ (Fed. Cir. 2002).

The PRB paper(s) and the Corps of Engineers paper(s) relate to a “Permeable Reactive Barrier” (PRB) method. A PRB method is a passive method that depends upon

“natural groundwater flow” for effectiveness. The Misquitta reference relates to a “Pump and Treat” groundwater recovery system. In contrast to a passive, natural ground water flow PRB method, a “Pump and Treat” method disrupts natural groundwater flow by diverting ground water to the surface for testing or treatment. A reference that teaches a disruptive “Pump and Treat” method is not “reasonably pertinent” to a passive, natural flow method. The references are not analogous art. *See In re Clay*, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992).

The Final Rejection states:

In this case, examiner is using Misquitta, a method and system of monitoring groundwater treatment, for the specifics of the monitoring method. How Misquitta remediated the groundwater is not applied to the applicant's claims or the primary references, and examiner is not combining two treatment methods, but a monitoring system of a groundwater treatment system with a groundwater treatment system.

Final Rejection page 11.

But, Applicants are not arguing that the PTO is “applying” two treatment methods; Applicants are arguing that the PTO has not met its burden of establishing that one skilled in the art would have been led to the claimed PRB treatment by a “Pump and Treat” treatment teaching and that the PTO is improperly “combining” teachings from different treatment methods without reasoned basis to do so. *See In re Lee, supra*. The rejection is based on a selective picking and choosing of features in a secondary reference, without any basis in the references for doing so. The rejection is supportable only through hindsight. *See In re Deuel*, 34 USPQ2d 1210, 1215 (Fed. Cir. 1995).

Further the Final Rejection states:

Groundwater treatment monitoring systems would be a logical area to investigate options for groundwater treatment monitoring systems.

Final Rejection page 11.

But, the claims do not claim “a method and system of monitoring groundwater treatment.” The claims are limited to “conducting a permeable-reactive barrier (PRB) treatment,” (emphasis added, claims 1 to 35) and to “a PRB zone to treat a contaminated

groundwater,” (emphasis added, claims 44 to 66). Additionally, the PRB paper and the Corps of Engineers paper do not broadly relate to “a method and system of monitoring groundwater treatment.” The PRB paper and the Corps of Engineers paper relate solely to a passive PRB treatment. Misquitta relates solely to “Pump and Treat.” The question to be asked to determine analogous art is not whether one skilled in the art would have been led to combine “a method and system of monitoring groundwater treatment.” The relevant question that the PTO must answer to properly support the combination of Misquitta with the PRB paper and Misquitta and the Corps of Engineers paper is whether one skilled in the art would have been led to combine a teaching of a disruptive pump and treat method with a passive natural flow method.

The Final Rejection states:

Applicant stresses that the PRB is a passive system, and that Misquitta teaches the monitoring of a pump and treat system, and examiner agrees this is true. However, the Corps of Engineer paper on page 81 notes that it is important that “traditional methods involving purging...should be avoided, so the Corps of Engineers is aware of the importance of non-disruption.

Final Rejection page 11.

Applicants are unclear of the reason the PTO cites this section of the Corps of Engineer paper. The Corps of Engineer paper statement is a very strong argument that the PTO’s combinations of references are incorrect. One skilled in the art would not look to a “Pump-and-Treat” art solution to a PRB treatment problem in view of the Corps of Engineer paper unambiguous statement that “traditional methods involving purging... should be avoided.” The page 81 Corps of Engineer paper statement is a teaching away from “reason to combine” the references. See *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied. 469 U.S. 851 (1984) and MPEP §2141.02, last section. The claimed “in-well” PRB monitoring is very surprising in view of the Corps of Engineer paper statement.

Further the Final Rejection states:

Thus page 26 Table 3-1 of the Corps of Engineering paper shows that pH,

Redox Potential, and dissolved oxygen are all monitored and analyzed with in-hole probes (also called downhole probes with multiple sensors and a flowthrough cell shielded by an inert gas in section 3.3.1 of the same page) - and the notation of no sample volume, no storage container, no sample holding time makes 100% clear that this monitoring is completely in-hole. Similarly, the PRB paper teaches in page 35 that in situ flow sensors are used with ground water monitoring wells. But the Corps of Engineering and PRB papers are silent on transmission of this data, and thus examiner cites Misquitta for the teaching of in-well sensors with wireless signal transmission.

Final Rejection pages 11 to 12.

Applicants appreciate that the PTO is citing Misquitta for an alleged “wireless” teaching. However, the fact that primary references fail to teach a prima facie case is not the legal, *In re Lee* reasoning that is required to properly combine another reference to make out a prima facie case. The question is whether teachings in the art provide the reasoning to properly combine Misquitta with the PRB references. *See In re Lee, supra*.

Further with regard to the Final Rejection pages 11 to 12 statement, first, Applicants disagree with the PTO’s characterization of the failure of the Corps of Engineering paper “notation of no sample volume, no storage container, no sample holding time” as any evidence at all of in-well monitoring let alone “wireless in-well” transmission. Silence of the primary references is not logical reasoning related to the “one skilled in the art” knowledge required to combine references. Silence of the reference in these respects is only logical reason to conclude that in-well wireless communication would not have been obvious to one skilled in the art.

Further and most important, the Office Action fails to make findings and fails to provide the required reasoning of why one skilled in the natural water flow PRB art would have been led to combine a teaching from a disruptive “Pump and Treat” art. Simply because the primary references fail to teach. The PTO has not provided findings or reasoned logic to combine another reference with the primary references. The rejections under 35 U.S.C. §103(a) over the PRB paper(s) and Misquitta and the Corps of Engineers paper(s) and Misquitta are based on improper combinations of references without reason to combine and should be withdrawn.

The Final Rejection Section 2, page 2 to 3 states:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the PRB papers to include in-well monitoring and Wireless transmission as taught by Misquitta in order to obtain accurate and dynamic readings of groundwater parameters with a minimum of on-site manpower.

However, the PTO has not made the findings to support this purported reason to combine the references. There is no teaching of a need for "accurate and dynamic readings" with "minimum... on-site manpower" in the PRB references and there is no teaching in Misquitta that a wireless transmission would provide "accurate and dynamic readings" with "minimum... on-site manpower in signal transmission. The PTO has not provided the logic to combine the references.

Section 7, page 15 of the Final Rejection reiterates an argument of the March 11, 2003 Office Action:

In response to applicant's argument that there is no suggestion to combine the references... [i]n this case, Misquitta specifies that automation is a benefit for remediation projects in col 2 lines 40-42, and examiner notes that costs for labor and manpower are a factor always considered in long-term projects, especially when the site is likely to be remote and hazardous, as contaminated sites usually are, as disclosed in col 8 lines 25-29.

Applicants responded:

The question is what is the reasoned logic to lead one skilled in the passive reactive barrier art to a "wireless" teaching in the Pump and Treat art. While automatic sampling might be "automation," a question of "wireless" is not. Nor are costs for labor and manpower considerations relatable to "wireless."

March 31, 2003 Request for Reconsideration, page 3.

Section 7, page 15 of the Final Rejection characterizes Applicants' March 31 argument as "applicant's argument that the wireless transmission was for a different reason other than 'where terrains or cost mitigates against the use of laying clown signal runs,'" (interior quotation in original). Section 7, page 15 then continues:

the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Ed. Pat. App. & Inter. 1985).

However, the PTO's characterization of "applicant's argument" and the purported recognition of "another advantage" are incorrect. (1) Applicants have not argued that "the wireless transmission was for a different reason other than 'where terrains or cost mitigates against the use of laying clown signal runs.'" (2) Applicants have not "recognized another advantage which would flow naturally from following the suggestion of the prior art." (3) Applicants have not argued a "basis for patentability when the differences would otherwise be obvious." Applicants' have simply pointed out that the PTO has failed to provide the *In re Lee* findings and reasoned logic required to properly to combine references to support a rejection..

Finally, Section 7, page 15 of the Advisory Action states:

Also, as stated above, wireless is not required for passive treatments, as applicant admitted by equating hardwired and wireless in the original application. It is the in-cell sensor which avoids disruption. Applicant request how costs for labor and manpower are related to "wireless", and examiner notes that electricians, ditchdiggers, site surveys, and much more are required to run electrical lines across sites to connect multiple wells' sensors to remote data collectors.

But, Applicants have not "admitted" by a purported "equating hardwired and wireless in the original application" that "wireless is not required for passive treatments." If the PTO disagrees, then the PTO is respectfully requested to identify the application statements that (1) equated hardwired and wireless" and to identify the application statements that (2) "wireless is not required for passive treatments."

Further, Applicants have not "request(ed) how costs for labor and manpower are related to 'wireless.'" If the PTO disagrees, then the PTO is respectfully requested to identify the statements of Applicants that "request how costs for labor and manpower are related to 'wireless.'" Again, the Final Rejection argument is based on mischaracterization of Applicants' arguments and statements.

Applicants' arguments are based on the legal requirements to support a

combination of references rejection. Applicants have argued that the PTO must provide an:

...objective teaching... [that] would lead [one skilled in the art] to combine the relevant teachings of the references.” *In re Fritch*, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)

... “When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. See, e.g., McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001) (“the central question is whether there is reason to combine [the] references,” a question of fact drawing on the Graham factors).”

....

...The Board [read PTO] must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious.”); *In re Fritch*, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (the examiner can satisfy the burden of showing obviousness of the combination “only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references”).

In re Lee, 277 F.3d 1338, _____, 61 USPQ 2d 1430, 1433-1434 (Fed. Cir. 2002).

Section 9, page 16 of the Final Rejection states:

examiner will state again that the problem being solved by “wireless transmission” was that of getting data communicated. Data communication does not disrupt PRBs, since applicant lists hardwired communication as an equivalent choice and acknowledges it is the pumping of samples to obtain the information, not the transmission, which is disruptive.

Again, this mischaracterizes Applicants’ arguments and specification statements.

- (1) Applicants do not disclose “hardwired communication as an equivalent choice” and
- (2) Applicants do not “acknowledge it is the pumping of samples to obtain the

information, not the transmission, which is disruptive.”¹ If the PTO disagrees, the PTO is respectfully requested to point out (1) where Applicants teach “handwired communication as an equivalent choice” and (2) where Applicants “acknowledge it is the pumping of samples to obtain the information, not the transmission, which is disruptive.”

Further, it is not Applicants’ burden in the first instance to establish an improper combination of references. It is the PTO’s burden to establish that a combination is proper. *See In re Lee, supra*. This has not been done in this case.

Section 9, page 16 of the Final Rejection further states:

Applicant argues that there is no teaching in Misquitta to apply wireless teachings to other than pump and treat systems, and requests where a teaching appears.

Again, this is a conclusionary mischaracterization of Applicants’ arguments. Applicants do not simply argue “that there is no teaching in Misquitta to apply wireless teachings to other than pump and treat systems, and requests where a teaching appears.”

Applicants argue:

The Misquitta reference relates to a “Pump-and-Treat” groundwater recovery system. In contrast to a passive, natural ground water flow PRB method, a “Pump and Treat” method disrupts natural groundwater flow by diverting ground water to the surface for treatment. A reference that teaches a disruptive pump and treat method is not “reasonably pertinent” to a passive, natural flow method. The references are not analogous art. *See In re Clay*, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992).

Page 2 of Applicants’ March 31, 2003 Request for Reconsideration.

And, Applicants argue that the PTO has not provided the reasoned logic to lead one skilled in the passive reactive barrier art to a “wireless” teaching in the “Pump and Treat” art. See Page 3 of Applicants’ March 31, 2003 Request for Reconsideration.

Section 9, page 16 of the Final Rejection further states:

¹ Indeed to the contrary, (1) a handwired communication is not an equivalent choice to wireless and (2) transmission of data through lines and conduits is disruptive to the natural flow required for an effective PRB.

Col 8 lines 25-27 state" "This (wireless) embodiment is useful for sites where the terrain or cost mitigates against the use of laying down signal runs", which would apply for both pump and treat and PRE sites.

However, this passage relates to the Misquitta FIG. 8 above ground wireless embodiment. How does a teaching of terrain or cost effective above ground wireless transmission provide the "reasoned logic" to combine a disruptive "Pump and Treat" technology teaching with a passive PRB teaching? Also, where do the PRB references teach a need for a terrain or cost effective mechanism for in well signal transmission. Without these, the PTO has not provided the findings and "reasoned logic" to combine the references. *See In re Lee, supra.*

The Final Rejection Section 10, pages 16 to 17 states:

applicant argues against the assertion, and demands a citation of a reference documenting, that costs for labor and manpower are always considered in long-term projects. Examiner is positive that costs are always considered in long-term projects, and believes that official notice is more than adequate. However, examiner is providing the 1997 General Electric (Assignee) Annual Report as documentation that costs are always considered.

First, the PTO's statement mischaracterizes applicants' argument. Applicants traversed the PTO's March 11, 2003 Office Action statement that "costs for labor and manpower are... always considered in long-term projects" and demanded citation of a reference or withdrawal of the combination rejections. Similarly, Applicants traversed the March 11, 2003 Office Action statement that this is true "especially when the site is likely to be remote and hazardous, as contaminated sites usually are" and demanded citation of a reference or withdrawal of the combination rejections.

Second, the characterization of the GE Report as responding to the citation demand is incorrect. GE does not teach that that "costs for labor and manpower are... always considered in long-term projects." The GE report does not teach that this is true "especially when the site is likely to be remote and hazardous, as contaminated sites usually are." If the PTO disagrees, the PTO is specifically requested to point out where the GE Report reference teaches that "costs for labor and manpower are... always considered in long-term projects" and that this is true "especially when the site is likely to

be remote and hazardous, as contaminated sites usually are.”

Third and most important, what an extraneous reference may teach or suggest is not relevant to the question of logic to combine a disruptive “Pump and Treat” reference with passive PRB treatment references. There is no teaching of a need for “costs for labor and manpower” improvement for in-well signal transmission in the PRB references and there is no teaching in Misquitta that a wireless transmission would improve “costs for labor and manpower” in signal transmission. The PTO has not provided the logic to combine the references.

The Final Rejection Section 11, page 17 states:

Examiner notes that costs increase when hazards are involved, as employees receive an extra amount for "hazardous work". This is documented, as demanded, in the hazardous duty pay rules for federal employees, "Frequently asked Questions about Hazardous Duty Pay for Federal Employees" posted 6/24/1998, and examiner has personally hired contractors who were paid a hazardous duty differential when working on contaminated sites.

First, what the Examiner “notes” is not evidence. If a document entitled "Frequently asked Questions about Hazardous Duty Pay for Federal Employees" is intended to support some position of the PTO or to provide required logic to combine references, then the PTO must make the document of record. Additionally, the PTO is respectfully requested to point out where the purported teaching appears in the document. “[W]hen the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference....” *In re Rijckaert*, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

Second, , what the extraneous "Frequently asked Questions about Hazardous Duty Pay for Federal Employees" document may teach or suggest is not relevant to the question of logic to combine disruptive “pump and treat” references with passive PRB treatment references. There is no teaching of a need for reduced hazardous pay for a PRB treatment in the PRB references and there is no teaching in Misquitta that a wireless transmission would reduce hazardous pay in signal transmission. The PTO has not provided the logic to combine the references.

The Final Rejection Section 12, page 17 states:

Contractors charge for travel time, and remote sites will require more travel time. This is documented, as demanded, in both APWU Convention Bulletin No 1, 7/20/1998 which discloses that postal workers get travel time, and "The Farrier & Hoofcare Resource Center", posted 1/28/1998 which clearly states that if you are a long way out, your travel costs when hiring a contractor to come out will increase. Examiner notes it also teaches that time is money, which is true in all fields, including, but not limited to, law, tarrier work, and electrical conduit installation, and thus would in all likelihood apply to workers at PRE remediation sites.

First, if the PTO is relying on documents entitled "APWU Convention Bulletin" and a document entitled "The Farrier & Hoofcare Resource Center" to support some position of the PTO or to provide required logic to combine references, then the PTO must make the document of record. Additionally, the PTO is respectfully requested to point out in the documents where the purported teachings appear. *In re Rijckaert*, supra.

Second, the purported teachings do not appear to be relevant to the *In re Lee* logic to combine requirements. The PTO is respectfully requested to explain "how you are a long way out, your travel costs when hiring a contractor to come out will increase" is relevant to the question of logic to combine disruptive "pump and treat" references with passive PRB treatment references. The PTO is respectfully requested to explain the relevance of "time is money, which is true in all fields, including, but not limited to, law, tarrier work, and electrical conduit installation" to the question of logic to combine disruptive "pump and treat" references with passive PRB treatment references. There is no teaching of a need for reducing travel costs or time for a PRB treatment in the PRB references or elsewhere and there is no teaching in Misquitta or elsewhere that a wireless transmission would reduce travel costs and time in signal transmission. The PTO has not provided the logic to combine the references.

Finally, the Final Rejection Section 13, page 17 states that "examiner notes that by definition contaminated sites are considered hazardous, precisely because of hazardous pollutants that make them contaminated." The Office Action then provides a definition of "contaminate" – "1. To make impure or unclean by contact or mixture. 2. To expose to

or permeate with radioactivity.” However first, the definitions do not support the PTO contention that “contaminated sites are considered hazardous.” The definitions indicate nothing about being “hazardous.” Second, the PTO has failed to identify the source of the definition. If the PTO intends to rely on this definition it must identify the source of the definition. *See In re Rijckaert, supra*. Finally, assuming that a contaminated site is hazardous, how does this provide the *In re Lee* required logic to combine references? There is no teaching of a need to reduce a hazard for a PRB treatment in the PRB references or elsewhere and there is no teaching in Misquitta that a wireless transmission would reduce hazards in signal transmission. The PTO has not provided the findings or logic to properly combine the references. *See In re Lee, supra*.

The PTO must provide “a full and reasoned explanation of its decision [to reject on the basis of a combination of references].” *In re Lee*, 61 USPQ 2d 1430, 1432-1433, 277 F.3d 1338, ____ (Fed. Cir. 2002). The PTO has failed to provide ““a full and reasoned explanation” why one skilled in the art would look to the disruptive “pump and treat” method for a teaching to address a passive PRB treatment process. The rejections of claims 1 to 35 and 44 to 66 under 35 U.S.C. §103(a) over the PRB paper(s) and Misquitta and claims 1 to 35 and 44 to 66 under 35 U.S.C. §103(a) over the Corps of Engineers paper(s) and Misquitta should be withdrawn as based on improper combinations of references.

II. EVEN IMPROPERLY COMBINED, THE REFERENCES DO NOT ESTABLISH A PRIMA FACIE CASE OF OBVIOUSNESS

Even improperly combined, the references do not teach or suggest “in well transmitting [a] signal by a wireless communication,” (claims 1 to 22) and the references do not teach or suggest a system comprising “a transmitter associated with the sensor in well to wirelessly transmit a signal,” (claims 44 to 66).

The November 5, 2002 Office Action in this case stated with respect to the Misquitta reference that “Col. 8 lines 14-40 teach wireless interconnected (web) communication links using radio communications,” page 9, lines 6 to 8. In a February 11, 2003 personal examiner interview, Applicants argued that Misquitta col. 8, lines 14 to 40

discloses only above-ground wireless transmission and that “a *prima facie* (sic, “*prima facie*”) case for a “wireless transmitter” was not made,” Interview Summary continuation page, line 10.² Applicants’ February 13, 2003 Amendment in this case argued:

the references do not establish a *prima facie* case of obviousness of “in-well” “wireless communications” claims 1 to 43 or of “a transmitter associated with the sensor in well to wirelessly transmit a signal” claims 44 to 65. The Office Action at page 7 states that “A transmitter... and the method of monitoring and transmitting” is [sic] taught in Misquitta in col. 6 lines 47-60 and col. 7 lines 7-21.” Applicants have carefully reviewed Misquitta. While Misquitta discloses a monitor that transmits a signal, the signal is transmitted by wire not “wirelessly.” See Misquitta col. 8, lines 41 to 50.

February 13 Amendment, paragraph bridging page 6 to 7.

The March 11, 2003 Office Action in this case continued the rejections of claims 1 to 35 and 44 to 66 under 35 U.S.C. §103(a) over the PRB paper(s) and Misquitta and claims 1 to 35 and 44 to 66 under 35 U.S.C. §103(a) over the Corps of Engineers paper(s) and Misquitta. The Office Action at page 7 stated that “A transmitter... and the method of monitoring and transmitting is [sic] taught in Misquitta in col. 6 lines 47-60 and col. 7 lines 7-21.” The Office Action also stated:

Examiner has specifically quoted Misquitta's in-well monitoring and wireless transmission. The fact that additional embodiments are disclosed is irrelevant.

Office Action section 7, page 12.

In Applicants’ March 31, 2003 Request for Reconsideration. Applicants argued that:

Applicants believe that the PTO is referring to the Office Action page 2 statement that “Misquitta teaches in-well monitoring and wireless transmission to a remote collector or monitor in Figs 5 and 10 and col 6 lines 47-60.” Again, Applicants have carefully examined the indicated Misquitta reference but are unable to find any teaching or suggestion of “in-well transmitting... by wireless communication” (claim 1, emphasis added).

² The Interview Summary characterizes this argument as Applicants’ “main point.”

On April 2, Applicants' representative called Examiner Mitchell to schedule a personal examiner interview for clarification of the very important point as to where the references teach or suggest "in-well transmitting" a signal "by a wireless communication" and as to where the references teach or suggest "a transmitter associated with" an in-well sensor "to wirelessly transmit a signal." In that April 2 conference, the PTO resurrected the November 5 Office Action argument that "wireless" is taught by Misquitta, "at col. 8 lines 14-40. But Applicants' representative pointed out that this was incorrect – Misquitta only teaches above-ground wireless communication - a very important "non-disruptive" distinction with respect to the Applicants' PRB invention.

In Section 6, page 12 of the Final Rejection, the PTO for the first time argues and states:

Here examiner notes that applicant appears to be interpreting the amended claim language in a manner not supported by the original disclosure. The original disclosure discloses only "in-well sensors" and in fact spells out that the in-well sensors 34/unit 28 are "electronically coupled to the transceiver unit 26", and that the transceiver unit 26 includes the receiver 30 and transmitter 32 capable of transmitting data by hardwired or wireless means:

The Advisory Action then quotes specification paragraphs [0030] through paragraph [0033].

While not clear, it is believed that the Final Rejection Section 6 is intended to be a response to Applicants' position that even improperly combined, the references do not teach or suggest "in well transmitting [a] signal by a wireless communication" (claims 1 to 22) and even improperly combined, the references do not teach or suggest a system comprising "a transmitter associated with the sensor in well to wirelessly transmit a signal" (claims 44 to 66). Again while not clear, it is believed that the PTO's Section 6 argument is that Applicants' claims must be interpreted as above-ground wireless communication, otherwise "in well transmitting [a] signal by a wireless communication" (claims 1 to 22) and "a transmitter associated with the sensor in well to wirelessly transmit a signal" (claims 44 to 66) would be "new matter."

However, no new matter rejection has been applied in these proceedings. Indeed, no new matter rejection would be appropriate. “[I]n well transmitting [a] signal by a wireless communication” (claims 1 to 22) and the references do not teach or suggest a system “a transmitter associated with the sensor in well to wirelessly transmit a signal” (claims 44 to 66) are both disclosed in original claims 55 to 63) and in the original specification FIG. 4, paragraph [0030] (sensing modules 18 and 20 include transceiver unit 26, which includes a receiver 30 and a transmitter 32 that can transmit “wirelessly”) and paragraph [0032] (unit 28 includes” a communications unit... capable of transmitting data... [by] wireless communication”).

The Final Rejection page 14 states:

Applicant had wireless transmission in Misquitta in col 8 lines 14-40 cited on page 9 lines 6-8 of office action mailed 11-5-2002, and on page 7 lines 8-9 of the office action mailed 1/23/2003. Applicant refers to the fact that col 8 lines 41-50 to argue that Misquitta does not teach wireless transmission, and that is true, but Misquitta has at least "preferred, yet another, and a more preferred" embodiments, and the "in yet another embodiment, shown in Fig 8, condition signal 410 from monitoring device 510 is transmitted by wireless means, such as radio waves, to computer controller 540". (col 8 lines 21-23) . Examiner apologizes that cutting and pasting did not relocate direction to see col 8 lines 14-40, but the reference was cited numerous times as teaching wireless transmission.

Again, Applicants point out that Misquitta col. 8, lines 14-40 teaches only above ground wireless transmission, not “in well transmitting [a] signal by a wireless communication” (claims 1 to 22) and not a system including “a transmitter associated with the sensor in well to wirelessly transmit a signal” (claims 44 to 66).³

The references do not establish a prima facie of obviousness of claims 1 to 22 and 44 to 66. The rejections under 35 U.S.C. 103 should be withdrawn.

³ The Final Rejection also argues that Applicants have not shown “criticality” for “wireless.” First, the burden is initially on the PTO to make out a prima facie case without regard to any applicant showing of “criticality.” The examiner bears the burden of establishing a prima facie case of obviousness. See *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992) and see MPEP 2143. Second, Applicants have pointed out the important advantages of “wireless” transmission for non-disruptive, in-well PRB monitoring at the interview, their previous Amendment and their Request for Reconsideration.

Further even improperly combined, the references do not teach or suggest a method comprising “determining flow of contaminated aqueous medium up-gradient, down-gradient and transecting a PRB zone” and “placing monitoring wells along the flow of contaminated medium” according to claims 10 to 14.

Further, even improperly combined, the references do not teach or suggest the web connection of the system of claim 59. (The Misquitta point to point communication is not a “web” connection).

For these additional reasons, the rejections of claims 10 to 14 and 59 should be withdrawn.

The PTO has failed to address the In re Lee findings and logic to combine requirements and the PTO has failed to address the in-well wireless transmission limitations of claims 1 to 22 and 44 to 66 MPEP 707.07, entitled “Completeness and Clarity of Examiner’s Action,” provides that “[t]he examiner must address all arguments which have not already been responded to in the statement of the rejection” and MPEP 707.07(f) entitled “Answer All Material Traversed” states “Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant’s argument and answer the substance of it.” Applicants’ arguments have not been addressed. Applicants respectfully request the PTO to withdraw the present Office Action and allow the claims or issue a non-final office action addressing Applicants’ reason to combine and “in-well” “wireless” arguments.

In the alternative, in accordance with MPEP 713.01, Applicants hereby request an examiner interview with the Examiner and the Primary Examiner prior to the next office action (1) to explain the PTO’s reasoning to combine the PRB references with the “Pump and Treat” reference and (2) to clearly identify the disclosure that the PTO relies on for a teaching of “in-well transmitting” a signal “by a wireless communication” or teaching of “a transmitter associated with” an in-well sensor “to wirelessly transmit a signal.” If that disclosure is alleged as the Misquitta col. 8 lines 14-40 teaching, then the interview is requested for the PTO to explain the position that the Misquitta col. 8 lines 14-40 teaching of above ground wireless transmission is a teaching or suggestion of “in-well

transmitting" a signal "by a wireless communication" or a teaching or suggestion of "a transmitter associated with" an in-well sensor "to wirelessly transmit a signal."

In view of the foregoing remarks, reconsideration and allowance of 1 to 35 and 44 to 66 are respectfully requested. Should the Examiner believe that any further action is necessary in order to place this application in condition for allowance, she is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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